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Organization:

Naval Research Laboratory

Title:

Terrain Properties and Topography
from Skylab Altimetry

Period Covered:

Monthly Progress Report, June 1974

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T4716B

Principal Investigator:

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Technical Monitor:

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The preliminary data analysis of Pass 1 (SL-2) and Passes 17, 18 and 28 (SL-3) has been completed. The four passes have covered a large variety of terrain, including extensive mountain and forest ranges in Passes 1 and 28, large areas of farm land (P 17), salt flats (P 28), lakes (P 17), ranches (P 18) and some smaller cities (P 18). The typical waveform of terrain radar returns indicates a quasi-specular reflection, which is further confirmed by statistical analysis of fluctuations of S & H gate output signals.

Investigation of the effect of received power variations on range tracker performance are continuing. Present peak height deviations extend from about ± 15 m for smooth areas to about ± 200 m for complex regions. The preparation of a catalogue of the observed areas and the corresponding radar signature will begin in the next reporting period.

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